

## CLAIMS

What is claimed is:

- 5           1. A device for controlling an imaging lens position, comprising:  
an image signal acquirer, which acquires an image signal;  
a focus lens moving unit, which moves a focus lens during an  
acquisition time period, in which said image signal acquirer acquires the  
image signal;  
10           a storage, which stores a position-dependent image signal, which  
is information correlating the image signal acquired by said image  
signal acquirer with a focus lens position, which is moved by said focus  
lens moving unit;  
a determinator for an imaging lens position, which determines an  
15           imaging lens position, which is a focus lens position for imaging, based  
on the position-dependent image signal stored by said storage.
- 20           2. The device for controlling an imaging lens position according  
to Claim 1, wherein said acquisition time period is a time period for  
acquiring an image signal of a frame.
3. The device for controlling an imaging lens position according  
to Claim 1 or 2, wherein said focus lens moves intermittently.
- 25           4. The device for controlling an imaging lens position according  
to Claim 3, wherein said position-dependent image signal is an image  
signal acquired during a non-moving state of said focus lens moving  
intermittently.

5        5. The device for controlling an imaging lens position according to any one of Claims 1 to 4, wherein said image signal acquirer comprises a vertical scanning means, which acquires an image signal by vertically scanning an image sensor arranged in a matrix.

10       6. The device for controlling an imaging lens position according to any one of Claims 1 to 4, wherein said image signal acquirer comprises a horizontal scanning means, which acquires an image signal by horizontally scanning an image sensor arranged in a matrix.

15       7. The device for controlling an imaging lens position according to Claim 5 or 6, wherein said image signal acquirer comprises a switching means for scanning direction, which switches said vertical scanning means and said horizontal scanning means.

20       8. The device for controlling an imaging lens position according to any one of Claims 1 to 7, wherein said image signal is a luminance signal.

      9. The device for controlling an imaging lens position according to any one of Claims 1 to 8, wherein said image signal is an RGB signal.

25       10. The device for controlling an imaging lens position according to any one of Claims 1 to 8, wherein said image signal is a CMYG signal.